Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the matter of:	)	
	)	
Fixed and Mobile Services in the Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.5 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz	)	ET Docket No. 10-142

REPLY TO OPPOSITIONS TO PETITION FOR RECONSIDERATION OF CTIA – THE WIRELESS ASSOCIATION®

CTIA – The Wireless Association® ("CTIA")[1] hereby respectfully replies to the Oppositions[2] filed against its Petition for Clarification and/or Reconsideration[3] ("Petition") of the Commission's April 2011 Mobile Satellite Service / Ancillary Terrestrial Service ("MSS/ATC") Report and Order ("*Order*") adopted in the above-captioned proceeding.[4]

CTIA's Petition demonstrated that the Commission's ATC rules have always placed full responsibility for interference mitigation on MSS/ATC licensees. The arguments raised in the Oppositions do not invalidate the arguments made by CTIA in its Petition. For the most part, the

[1] CTIA – The Wireless Association® is the international organization of the wireless communications industry for both wireless carriers and manufacturers. Membership in the organization includes Commercial Mobile Radio Service ("CMRS") providers and manufacturers, including cellular, Advanced Wireless Service, 700 MHz, broadband PCS, and ESMR, as well as providers and manufacturers of wireless data services and products.

[2] *See* Opposition of LightSquared Subsidiary LLC, ET Docket No. 10-142 (Aug. 25, 2011) ("LightSquared Opposition"); Opposition of Sprint Nextel Corporation, ET Docket No. 10-142 (Aug. 25, 2011) ("Sprint Opposition").

[3] *See* Petition for Clarification and/or Reconsideration of CTIA, ET Docket No. 10-142 (June 30, 2011) ("CTIA Petition for Reconsideration").

[4] *See Fixed and Mobile Services in the Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.5 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz*, Report and Order, 26 FCC Rcd 5710 (Apr. 6, 2011) ("*2011 MSS Order*").

Oppositions contend that the language in paragraph 28 of the *2011 MSS Order* is consistent with the existing state of the law. The Oppositions further argue that Section 25.255 of the Commission's rules – established as a "backstop" to unequivocally require MSS/ATC operators to resolve any interference caused by them – contains implicit limitations that render the rule superfluous. As detailed in CTIA's earlier Petition and below, these positions are inconsistent with the plain text of the Commission's rules and relevant orders.

CTIA filed its Petition to address concerns it had regarding the Commission's statement in paragraph 28 of the *2011 MSS Order* that "responsibility for protecting services rests not only on new [MSS/ATC] entrants *but also on incumbent users themselves*."[5] This language appears to partially shift the burden of interference protection from MSS/ATC licensees to incumbent users, in direct conflict with the Commission's existing rules for this band, which in this instance place the full responsibility for all interference mitigation on MSS/ATC licensees. This language in the Commission's Order, if it signals a change in Commission policy, was adopted without notice and public comment, and interested parties were therefore denied the opportunity to address the merits of a potential shift in Commission policy.[6] In light of this, the Petition asked the Commission to either clarify or reconsider the *Order's* language. Because the arguments raised in the Oppositions do not accurately capture the current state of the law and do not refute the arguments put forth in the Petition, CTIA requests that the Commission grant its Petition.

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5 *See 2011 MSS Order* at ¶ 28

6 *Fixed and Mobile Services in the Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.5 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz*, Notice of Proposed Rulemaking and Notice of Inquiry, 25 FCC Rcd 9481 (2010) ("*NPRM*"). The *NPRM* did not propose, or seek comment on, shifting the burden of interference protection from MSS/ATC licensees to CMRS licensees, nor did the *NPRM* ask how to address any increased interference that could result from liberalized MSS/ATC rules. Rather, the *NPRM* focused exclusively on two topics: (i) adding co-primary Fixed and Mobile allocations to the 2 GHz band; and (ii) applying the Commission's secondary market policies and rules to MSS spectrum used for terrestrial services. *Id.*

I. THE COMMISSION SHOULD CLARIFY THAT THE *ORDER* WAS NOT INTENDED TO LIMIT THE INTERFERENCE PROTECTIONS SET FORTH IN ITS ATC RULES OR IMPOSE NEW INTERFERENCE PROTECTION OBLIGATIONS ON NON-MSS/ATC SERVICES.

The Commission's ATC rules have always placed the complete responsibility for interference mitigation on MSS/ATC licensees. While this is not the case with all bands of spectrum, it is the case in this band. This rule was adopted in addition to the establishment of technical parameters that sought to prevent interference from MSS terrestrial operations. Indeed, when the Commission adopted its ATC rules in 2003, it acknowledged—among other things—that unwanted emissions from terrestrial stations would "have to be carefully controlled in order to avoid interfering with GPS receivers."[7] Consistent with this finding, the Commission "adopt[ed] technical parameters for ATC operations in each of the bands at issue designed to protect adjacent and in-band operations from interference from ATC."[8]

Rather than leave adjacent licensees to operate in an environment where the only protections are those technical parameters, as discussed above, the Commission also codified Section 25.255 of its rules.[9]

- In the *2003 ATC Order*, the Commission stated that "in the unlikely event that an adjacent MSS or other operator does receive harmful interference from ATC operations, either from ATC base stations or mobile terminals, *the ATC operator must resolve such interference*."[10] In that Order, as well as in 2005 and 2008, the Commission reaffirmed the requirement that the MSS licensee is responsible for all interference.

- In the *2005 ATC Reconsideration Order*, the Commission reaffirmed that "[t]he MSS/ATC operator is … required to resolve any harmful interference to other services caused by its ATC base stations or handsets."[11]

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7 *Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Bands*, Report and Order and Notice of Proposed Rulemaking, 18 FCC Rcd 1962, ¶ 124 (2003) ("*2003 ATC Order*").

8 *Id*. at ¶ 104.

9 47 C.F.R. § 25.255 ("If harmful interference is caused to other services by ancillary MSS ATC operations, either from ATC base stations or mobile terminals, the MSS ATC operator must resolve any such interference.").

10 *2003 ATC Order* at ¶ 104 (emphasis added).

11 *Flexibility for Delivery of Communications by Mobile Satellite Service Providers,*

- In 2008, the Commission most recently reminded ATC operators that its "rules impose an *absolute obligation* on the MSS/ATC operator to resolve *any* harmful interference to other services."[12] The Commission also made "clear that none of" the technical limits it adopted "will relieve ATC of its absolute obligation to eliminate any harmful interference to BRS that may nevertheless occur, including its obligation to reduce the power of operations in its upper channel or channels, or cease operations entirely in its upper channel or channels, to eliminate harmful interference to BRS Channel 1 operations."[13] In fact, the Commission "reaffirm[ed] [its] rule that the ATC operator must resolve any complaints of harmful interference to other authorized services in and adjacent to the S-band, including grandfathered BAS and private radio operations."[14]

Paragraph 28 of the *2011 MSS Order* conflicts with the fact that the Commission has not modified these requirements, and the burden of out-of-band interference protection remains squarely on the shoulders of ATC operators. Given this, CTIA asks the Commission to either clarify or reconsider the language it included in paragraph 28 of the *Order*.

II. THE ARGUMENTS RAISED BY OPPONENTS OF CTIA'S PETITION DO NOT CONTRADICT THE MERITS OF THE PETITION.

The arguments raised in the Oppositions do not invalidate the arguments made by CTIA in its Petition. The arguments in the Oppositions seek to support the language in paragraph 28 of the *2011 MSS Order* as reflecting the current state of the law for MSS/ATC service. CTIA's Petition, however, demonstrated that this interpretation contradicts the plain text of the Commission's rules, as well as three Commission orders in 2003, 2005 and 2008. Moreover, for the Commission to uphold the statements in paragraph 28, a notice and comment rulemaking would be required. The specific arguments raised in the Oppositions are discussed below.

First, the Oppositions assert that "Commission precedent makes GPS receiver

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(Continued . . .)
Memorandum Opinion and Order and Second Order on Reconsideration, 20 FCC Red 4616, ¶ 11 (2005) ("*2005 ATC Reconsideration Order*").

12 *Spectrum and Service Rules for Ancillary Terrestrial Components in the 1.6/2.4 GHz Big LEO Bands*, Report and Order, 23 FCC Rcd 7210, ¶ 35 (2008) (emphasis added) (citing 47 C.F.R. § 25.255).

13 *Id*. at ¶ 32.

14 *Id*.

manufacturers responsible for rejecting signals transmitted on non-GPS frequencies."[15] To support this argument, LightSquared relies on statements made in a section of the *2005 ATC Reconsideration Order* that did not address the interplay of ATC and GPS. Rather, the provisions addressed interference issues between ATC base stations and Inmarsat's receivers.[16] Without explaining why the Commission's discussion of interference to Inmarsat receivers should inform the instant situation, LightSquared extrapolates that GPS manufacturers and service providers—not ATC operators—must shoulder the burden of protecting GPS from ATC interference.

LightSquared does not discuss the section of that *2005 ATC Reconsideration Order* that actually addresses the interplay between GPS and ATC operations. That section bolsters CTIA's position that ATC operators must protect GPS devices. Specifically, the Commission declares that "*it is essential to ensure that GPS does not suffer harmful interference*…."[17]

Even in the discussion of Inmarsat receivers that LightSquared cites, the Commission emphasized that the existing base of "safety of life" receivers required interference protection: "[I]t is important to provide some amount of protection to current receivers used by Inmarsat in the L-band because some of Inmarsat's operations are safety-related…."[18] GPS is similarly positioned—with an embedded base of devices used for "safety of life" services (*e.g.*, E911 location information and federal aviation services). As such, LightSquared's arguments are inconsistent with the text of the same order it relies upon as its basis for arguing that GPS should not receive full interference protection from ATC operations.

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15 LightSquared Opposition at 6-8; *see also* Sprint Opposition at 7 ("Despite the suggestions advanced by CTIA and the Council, Section 25.255 of the Commission's rules does not conflict with, supersede or otherwise diminish the Commission's balanced policy of imposing responsibility on both new entrants and affected incumbents to resolve harmful interference.").

16 LightSquared Opposition at 6-8.

17 *2005 ATC Reconsideration Order* at ¶ 70. To advance this objective, the FCC predicted that future rulemakings might be used to promulgate additional rules that further "ensure that all FCC services provide adequate protection to GPS, and produce a more complete record upon which to establish final GPS protection limits for MSS ATC licensees." *Id.*

18 *Id*. at ¶ 56.

Sprint argues that the "Commission's policies have long contemplated that interference resolution requires cooperation between transmitting and receiving parties."[19] CTIA, in general, agrees with this statement. As CTIA has argued in this and other MSS-related proceedings, however, the MSS band rules – particularly Section 25.255 – make this spectrum different. Sprint's argument is not focused on the Commission's treatment of interference caused by ATC service, but rather on other unrelated services. Indeed, Sprint cites to the Commission's treatment of interference between 800 MHz commercial cellular operators and 800 MHz public safety communications systems,[20] interference relating to certain Part 90 services, and interference in the 2500-2690 MHz band. These examples support CTIA's belief that other bands are different. Further, these examples were adopted with notice and public comment, and interested parties were provided the opportunity to address the merits of this shift in Commission policy, in contrast to the Commission's action here.

With respect to ATC operations, the Commission already conducted the traditional balancing of interference mitigation that it often undertakes as part of a new entrant's deployment into a band. The result was Sections 25.253 and 25.255 of the Commission's rules providing specific interference mitigation burdens on MSS/ATC providers.[21] Not only does Section 25.255 expressly place responsibility on the ATC operator to resolve any harmful interference caused by ancillary ATC operations, Section 25.253(c)(2) further requires certain ATC applicants to coordinate with terrestrial CMRS operators prior to initiating ATC transmissions when co-locating ATC base stations with terrestrial CMRS base stations that make use of GPS time-based receivers.[22] If anything, the examples cited by Sprint bolster CTIA's

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19 Sprint Opposition at 2.

20 In rectifying interference in the 800 MHz band, the Commission imposed absolutely no burden on the interfered with safety of life services. All relocation and remediation costs were borne by Sprint Nextel and cellular providers.

21 *See* 47 C.F.R. §§ 25.253, 25.255.

22 CTIA notes that the Oppositions do not address CTIA's arguments regarding Section 25.253.

position that MSS/ATC operators must shoulder the entire interference burden. If the Commission wanted to impose mutual responsibilities among GPS incumbents and new entrants, it would have expressly provided for this in its rules, as it has in the cases cited by Sprint.

Second, LightSquared asserts that "Section 25.255 is inapplicable to GPS receiver overload."[23] The plain language of Section 25.255 provides no such exception. If the FCC had wanted to carve out receiver overload from this rule, it could have done so at multiple steps in the MSS/ATC Proceeding. It did not. Therefore, consistent with the "Plain Meaning" canon of construction, the Commission should not try to read exceptions into a provision that do not exist.[24] Additionally, and as noted above, the Commission has reminded ATC operators that its "rules impose an *absolute obligation* on the MSS/ATC operator to resolve *any* harmful interference to other services."[25] Notably, the Commission also remarked that its "adoption of out-of-band emissions limits for the upper edge of Globalstar's ATC authorization raises no presumption that Globalstar's ATC is not causing harmful interference if it meets these limits. ATC enjoys no rights vis-à-vis other primary services in the same *or adjacent bands*."[26]

Further, the Commission explicitly explained to ATC operators that Section 25.255 includes a duty to prevent and resolve overload interference: "With respect to Sprint Nextel's concerns regarding receiver overload interference, we note that this is among the problems that ATC must take into account in avoiding harmful interference to other services."[27] Finally, LightSquared's assertion also is contradicted by the Commission's most recent express directive

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23 LightSquared Opposition at 9.

24 *Connecticut Nat'l Bank v. Germain*, 112 S. Ct. 1146, 1149 (1992) ("[I]n interpreting a statute a court should always turn to one cardinal canon before all others. . . .[C]ourts must presume that a legislature says in a statute what it means and means in a statute what it says there.").

25 *Spectrum and Service Rules for Ancillary Terrestrial Components in the 1.6/2.4 GHz Big LEO Bands*, Report and Order, 23 FCC Rcd 7210, ¶ 35 (2008) (citing 47 C.F.R. § 25.255) (emphasis added).

26 *Id*.

27 *Spectrum and Service Rules for Ancillary Terrestrial Components in the 1.6/2.4 GHz Big LEO Bands*, Report and Order, 23 FCC Rcd 7210, n. 119 (2008).

to include in LightSquared's technical report "the working group's analyses of the potential for overload interference to GPS devices from LightSquared's terrestrial network of base stations, technical and operational steps to avoid such interference, and specific recommendations going forward to mitigate potential interference to GPS devices."[28]

Third, Sprint claims that the interference caused by ATC operations may not fit the FCC's definition of "harmful interference" and therefore Section 25.255 is inapplicable.[29] Sprint explains that the Commission's rules define "harmful interference" as "[i]nterference which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs, or repeatedly interrupts" a radiocommunication service operating in accordance with relevant Commission regulations. CTIA believes that the record evidence in the ongoing LightSquared proceeding details that the interference caused by ATC operations is serious, ongoing, and dangerous.[30] As such, ATC interference is best viewed as more than "merely a nuisance or annoyance," and has been classified as "harmful interference" by the Technical Working Group reports in many instances—and therefore would be considered harmful under the Commission's rules.[31] In any event, the Commission separately is evaluating the potential for interference and CTIA takes no position on the issue here. CTIA's Petition is focused solely on the statement in paragraph 28 of the *2011 MSS Order* that appears to partially shift the burden of interference protection from MSS/ATC licensees to incumbent users in direct

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[28] *In the Matter of LightSquared Subsidiary; Request for Modification of its Authority for an Ancillary Terrestrial Component*, 26 FCC Rcd 566, ¶ 43 (Jan. 25, 2011).

[29] Sprint Opposition at 4-5

[30] *See, e.g.*, Final Report of the GPS Technical Working Group, *attached to* Letter from Henry Goldberg, Counsel for LightSquared Subsidiary LLC to Marlene H. Dortch, Secretary, Federal Communications Commission, SAT-MOD-20101118-00239 (filed June 30, 2011); National Space-Based Positioning, Navigation, and Timing Systems Engineering Forum, *Assessment of LightSquared Terrestrial Broadband System Effects on GPS Receivers and GPS-dependent Applications*, *attached to* Letter from Lawrence E. Strickling, Assistant Secretary for Communications and Information, United States Department of Commerce, to the Hon. Julius Genachowski, Chairman, Federal Communications Commission, IBFS File No. SAT-MOD-20101118-00239 (filed July 6, 2011).

[31] Sprint Opposition at 5.

conflict with the Commission's existing rules.

Fourth, Sprint argues that "the context surrounding the enactment of Section 25.255 also demonstrates that it should be fairly read to apply only to interference concerns between systems operating in the same band…."[32] As with LightSquared's argument regarding GPS receiver overload, the plain language of Section 25.255 does not support this interpretation. The meaning of Section 25.255 is clear: it applies to *any* interference caused by MSS ATC operators and "ATC enjoys no rights vis-à-vis other primary services in the same *or adjacent bands*."[33] If the Commission intended to limit this rule to interference between systems operating in the same band it would have explicitly included this limitation in the rule and it would not have mentioned adjacent bands in its 2008 Order. It chose not to limit the application of Section 25.255. Moreover, the definitions agreed to in the Technical Working Group process for harmful interference and the testing done therein was between GPS operations and the ATC operations of LightSquared.[34] Other than Section 25.255 requirements, such testing would not have been required if the Commission was to accept an interpretation limiting Section 25.255's application solely to co-channel interference.

Finally, LightSquared asserts that "Section 25.255 is inapplicable" because the "rule by its terms applies solely to interference to services 'authorized' by the Commission."[35] LightSquared further argues that GPS receivers are not part of a service authorized by the Commission. Rather, "they are unlicensed Part 15 devices that are required to accept interference."[36] However, GPS operations are clearly comprised of both space stations and

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[32] *Id*. at 7.

[33] *Spectrum and Service Rules for Ancillary Terrestrial Components in the 1.6/2.4 GHz Big LEO Bands*, Report and Order, 23 FCC Rcd 7210, ¶ 35 (2008) (citing 47 C.F.R. § 25.255) (emphasis added).

[34] *Comment Deadlines Established Regarding the LightSquared Technical Working Group Report*, Public Notice, IB Docket No. 11-109, DA 11-1133, at 1 (June 30, 2011).

[35] LightSquared Opposition at 8.

[36] *Id*.

receivers—and the entire system must receive interference protection, otherwise the Commission's rules would have no meaning or practical effect. Under LightSquared's reasoning, services such as TV and radio broadcasting—which rely solely upon receivers that are only subject to Part 15 verification procedures—would be "unlicensed" receivers that receive no interference protection.[37] GPS has a primary allocation under the Commission's rules and is subject to full interference protection for both its space stations as well as its receivers.[38] Even if this were not clear from the allocation status of the GPS, the Commission has gone further to provide absolute certainty on the interference protection provided to GPS. As noted above, the Commission has asserted that GPS interference protection is "essential" and that "all FCC services provide adequate protection to GPS."[39] As such, the Commission's rules, including Sections 25.253 and 25.255, make clear that GPS receivers have interference protection from other services. Finally, and critically, LightSquared would not have been required to participate in an extensive testing program designed to determine interference effects to GPS receivers unless the protection requirements surrounding such devices were absolutely clear.

III. CONCLUSION

For the foregoing reasons, CTIA encourages the Commission to reconsider or clarify paragraph 28 of the *Order*.

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37 This is inconsistent with the FCC's rules and labeling requirements. *See* 47 C.F.R. § 15.19 (a)(1) and 47 C.F.R. § 15.19 (a)(3) (The FCC's labeling requirements for receivers associated with a licensed radio service, such as GPS, require only that such devices "not cause harmful interference." They do not require such devices to accept harmful interference. On the other hand, the labeling requirements for "other devices," *i.e.*, those devices not associated with licensed radio services and not covered elsewhere in the rules, require such devices to "accept any interference received, including interference that may cause undesired operation.").

38 *See* 47 C.F.R. § 2.106 (Table of Frequency Allocations).

39 *2005 ATC Reconsideration Order* at ¶ 70.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, Shanée Meeks, do hereby certify that on this 6th day of September 2011, I caused copies of the foregoing "Reply to Oppositions to Petition for Reconsideration of CTIA – The Wireless Association® to be delivered to the following via First Class U.S. mail and via email:

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